

Mineral Industry Surveys

For information, contact:

Kim B. Shedd, Cobalt Commodity Specialist

U.S. Geological Survey

989 National Center

Reston, VA 20192

Telephone: (703) 648-4974, Fax: (703) 648-7757

E-mail: ksheddd@usgs.gov

Jo-Ann Sterling (Data)

Telephone: (703) 648-7953

Fax: (703) 648-7975

Internet: <http://minerals.usgs.gov/minerals>

COBALT IN APRIL 2002

U.S. consumption of cobalt in January through April 2002 was 10% lower than that during the first 4 months of 2001, according to the U.S. Geological Survey. The cobalt content of U.S. imports of cobalt metal and chemicals was 6% higher during January through March 2002 than that of imports during the same period in 2001. The cobalt content of U.S. exports of unwrought cobalt and chemicals was 45% lower during January through March 2002 than that during the same period in 2001. Trade data for April 2002 will be available in a subsequent issue.

Note

With the exception of prices, all data in this report have been rounded to no more than three significant digits. Totals

and percentages were calculated by using unrounded data.

Price

Prices for electrolytic cobalt, in dollars per pound, from Platts Metals Week are listed below.

<u>Date</u>	<u>Price range</u>
May 30	7.75-8.25
June 6	7.50-8.10
June 13	7.50-8.00

<u>Month</u>	<u>Average price</u>
May	8.26

TABLE 1
U.S. REPORTED CONSUMPTION OF COBALT MATERIALS 1/

(Metric tons, contained cobalt)

Period	Metal 2/	Oxide and other chemical compounds 3/	Scrap	Total
2001:				
April	308	122	209	640
May	298	120	210	627
June	281	147	209	638
July	303	117	209	629
August	283	110	209	602
September	279	137	209	626
October	302	104	209	615
November	312	105	209	627
December	309	112	209	631
January-April r/	1,230	551	842	2,620
January-December 4/	3,600	1,500	2,520	7,620
2002:				
January	281	97	215	594 r/
February	268	98 r/	215	582
March	277	104 r/	215	597 r/
April	264	111	215	591
January-April	1,090	411	860	2,360

r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes metal powder.

3/ Data may include other cobalt materials.

4/ Data based on monthly reports.

TABLE 2
U.S. REPORTED CONSUMPTION OF COBALT, BY END USE 1/

(Metric tons, contained cobalt)

End use	2001		2002	
	January- April	January- December 2/	April	January- April 3/
Steel	78 r/	207	22	72
Superalloys	1,200	3,620	272	1,140
Magnetic alloys	252	683	46	188
Other alloys 4/	W	W	W	W
Cemented carbides 5/	269	798	65	252
Chemical and ceramic uses 6/	722	2,020	162	612
Miscellaneous and unspecified	103	297	25	98
Total	2,620 r/	7,620	591	2,360

r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Miscellaneous and unspecified."

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Data based on monthly reports.

3/ May include revisions to prior months.

4/ Includes nonferrous alloys, welding materials, and wear-resistant alloys.

5/ Includes diamond tool matrices, cemented and sintered carbides, and cast carbide dies or parts.

6/ Includes catalysts, driers in paints or related usage, feed or nutritive additive, glass decolorizer, ground coat frit, pigments, and other uses.

TABLE 3
U.S. REPORTED STOCKS OF COBALT MATERIALS 1/

(Metric tons, contained cobalt)

Period	Industry 2/ Oxide and other chemical compounds 4/				U.S. Government. metal 5/
	Metal 3/	Scrap	Total		
2001:					
April	363	214	163	740	9,120
May	335	211	163	709	8,850
June	300	196	163	659	8,480
July	298	219	163	680	8,420
August	319	236	163	718	8,260
September	313	238	163	713	8,180
October	339	230	162	732	NA
November	325	223	163	711	NA
December 6/	335	212	163	710	7,230
2002:					
January	356	243 r/	163	762 r/	NA
February	347 r/	239 r/	162	749 r/	NA
March	320	250 r/	163	732 r/	NA
April	308	239	163	710	NA

r/ Revised. NA Not available.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Stocks reported by cobalt processors and consumers.

3/ Includes metal powder.

4/ Data may include other cobalt materials.

5/ Data from Defense National Stockpile Center. Includes material committed for sale pending shipment.

6/ Data based on monthly reports.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF COBALT, BY COUNTRY 1/

(Kilograms, gross weight of material, except as noted)

Period and country of origin	Metals 2/		Oxides and hydroxides		Salts and compounds 3/		Total cobalt content for the month 5/	Cobalt content, year to date 5/ 6/
	Quantity	Value 4/	Quantity	Value 4/	Quantity	Value 4/		
2001:								
March	615,000	\$16,700,000	96,400 7/	\$2,050,000 7/	256,000	\$1,320,000	753,000	2,310,000
April	679,000	18,600,000	106,000	2,400,000	234,000	1,240,000	817,000	3,130,000
May	836,000 7/	21,100,000 7/	50,600	1,210,000	80,400	518,000	896,000	4,030,000
June	687,000	16,300,000	152,000	2,820,000	84,700	486,000	820,000	4,850,000
July	525,000	12,500,000	119,000	2,090,000	184,000	966,000	658,000	5,500,000
August	646,000	14,300,000	106,000	1,910,000	174,000	872,000	768,000	6,270,000
September	569,000	12,300,000	64,600	1,310,000	198,000	973,000	668,000	6,940,000
October	826,000	16,400,000	91,900	1,760,000	332,000	1,690,000	982,000	7,920,000
November	603,000 7/	10,500,000 7/	81,000	1,330,000	142,000	654,000	700,000	8,620,000
December	553,000	9,200,000	91,900	1,340,000	254,000	1,080,000	689,000	9,310,000
January-December	7,810,000	180,000,000	1,280,000	25,700,000	2,140,000	10,900,000	9,310,000	XX
2002:								
January	729,000 7/	11,500,000 7/	101,000	1,550,000	267,000	1,220,000	877,000	877,000
February	564,000	9,020,000	148,000	2,300,000	202,000	727,000	725,000	1,600,000
March:								
Australia	--	--	--	--	--	--	--	20,000
Belgium	7,490	456,000	85,300	1,550,000	--	--	68,900	230,000
Brazil	20,000	304,000	--	--	--	--	20,000	100,000
Canada	82,200	1,360,000	--	--	--	--	82,200	232,000
China	--	--	--	--	--	--	--	38,500
Congo (Kinshasa)	49,900	578,000	--	--	--	--	49,900	130,000
Finland	102,000	1,910,000	61,900	748,000	166,000	571,000	192,000	605,000
France	1,880	61,000	3,000	150,000	--	--	4,040	10,900
Germany	2,500	110,000	4,000	58,200	--	--	5,380	6,130
Japan	626	37,100	--	--	--	--	626	4,130
Korea, Republic of	51	3,230	--	--	--	--	51	249
Morocco	17,000	259,000	--	--	--	--	17,000	31,000
Norway	193,000	2,900,000	--	--	--	--	193,000	489,000
Philippines	--	--	--	--	13,000	84,400	4,800	8,140
Russia	144,000	2,220,000	--	--	--	--	144,000	344,000
South Africa	--	--	--	--	--	--	--	77,500
Sweden	1,960	39,700	--	--	--	--	1,960	4,870
Switzerland	--	--	--	--	--	--	--	3
Uganda	--	--	--	--	--	--	--	13,000
United Kingdom	--	--	7,780	177,000	37,000	194,000	14,500	53,900
Zambia	56,800	801,000	--	--	--	--	56,800	56,800
Total	679,000	11,000,000	162,000	2,690,000	216,000	849,000	854,000	2,460,000

XX Not applicable. -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Unwrought cobalt, excluding alloys; includes cobalt cathode and cobalt metal powder.

3/ Includes cobalt acetates, cobalt carbonates, cobalt chlorides, and cobalt sulfates.

4/ Customs value.

5/ Estimated from gross weights.

6/ May include revisions to prior months.

7/ All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS, BY COUNTRY 1/

(Kilograms, gross weight of material, except as noted)

Period and country of origin	Unwrought cobalt alloys		Other cobalt: matte, waste and scrap 2/		Wrought cobalt and cobalt articles	
	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/
2001:						
March	4,090	\$87,100	49,200 4/	\$381,000 4/	26,700	\$1,490,000
April	4,250	91,900	67,000	1,550,000	13,100	839,000
May	8,030	193,000	22,600 4/	823,000 4/	25,100	813,000
June	22,200	445,000	67,400 4/	888,000 4/	14,600	980,000
July	6,570	147,000	57,400 4/	537,000 4/	14,500	989,000
August	3,480	64,600	46,400 4/	1,060,000 4/	13,200	845,000
September	1,140	51,500	18,500 4/	515,000 4/	15,400	947,000
October	3,410	105,000	32,000 4/	709,000 4/	19,400	1,170,000
November	10,800	250,000	22,400 4/	519,000 4/	17,000	1,030,000
December	2,130	47,500	49,200 4/	1,010,000 4/	21,800	1,370,000
January-December	73,200	1,670,000	631,000	11,500,000	233,000	13,400,000
2002:						
January	6,990	152,000	73,900 4/	1,170,000 4/	23,000	925,000
February	3,650	154,000	15,800	379,000	15,300	932,000
March:						
Austria	250	13,900	--	--	--	--
Belgium	--	--	--	--	2,850	79,700
Canada	1,170	173,000	897	34,000	2,480	291,000
Finland	--	--	42,100	735,000	--	--
France	--	--	770	48,000	2,840	170,000
Germany	--	--	--	--	3,490	97,700
Ireland	--	--	7,700	83,300	150	4,680
Japan	--	--	9,720	229,000	1,920	58,400
Switzerland	--	--	1,050	12,800	--	--
United Kingdom	--	--	25,900	130,000	7,180	374,000
Total	1,420	187,000	88,200	1,270,000	20,900	1,080,000

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes other intermediate products of cobalt metallurgy; may include other cobalt-bearing materials from which cobalt is extracted, or from which cobalt-containing chemical compounds are manufactured.

3/ Customs value.

4/ All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.

TABLE 6
U.S. EXPORTS OF COBALT MATERIALS 1/

(Kilograms, gross weight of material, except as noted)

Period	Unwrought cobalt, powders, matte, waste and scrap 2/		Oxides and hydroxides		Salts and compounds 3/		Total cobalt content for the month 5/	Cobalt content, year to date 5/ 6/
	Quantity	Value 4/	Quantity	Value 4/	Quantity	Value 4/		
2001:								
March	166,000	\$5,700,000	171,000	\$1,220,000	14,400	\$90,700	292,000	850,000
April	141,000	4,550,000	210,000	1,530,000	19,500	192,000	298,000	1,150,000
May	220,000	5,590,000	84,200	654,000	26,100	209,000	287,000	1,430,000
June	204,000	5,460,000	116,000 7/	1,070,000 7/	39,000	334,000	297,000	1,730,000
July	146,000	3,960,000	211,000 7/	1,160,000 7/	30,000	231,000	306,000	2,040,000
August	189,000	5,270,000	27,400 7/	241,000 7/	29,800	173,000	216,000	2,250,000
September	186,000	4,730,000	32,100	473,000	3,030	27,100	210,000	2,460,000
October	184,000	5,100,000	6,530	155,000	35,400	221,000	197,000	2,660,000
November	306,000	4,520,000	41,600	581,000	7,770	34,300	338,000	3,000,000
December	182,000	3,220,000	32,500	701,000	9,110	77,100	207,000	3,210,000
January-December	2,230,000	57,300,000	1,260,000	10,200,000	254,000	1,980,000	3,210,000	XX
2002:								
January	127,000	2,870,000	25,600	379,000	14,100	98,500	149,000	149,000
February	140,000	2,850,000	6,090	88,100	13,400	85,300	148,000	297,000
March	167,000	3,370,000	5,820	71,700	12,200	67,700	174,000	471,000

XX Not applicable.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ May include other intermediate products of cobalt metallurgy, and unwrought cobalt alloys.

3/ Cobalt acetates and cobalt chlorides.

4/ Free alongside ship (f.a.s.) value.

5/ Estimated from gross weights.

6/ Year to date may include revisions to prior months.

7/ All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.

TABLE 7
U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE, AND CONCENTRATES 1/

(Kilograms, gross weight of material, except as noted)

Period	Wrought cobalt and cobalt articles		Cobalt ore and concentrates	
	Quantity	Value 2/	Quantity	Value 2/
2001:				
March	118,000	\$3,040,000	75,200 3/	\$477,000 3/
April	55,000	1,860,000	95,000 3/	677,000 3/
May	44,100	2,250,000	23,200 3/	54,900 3/
June	31,300	2,200,000	95,800 3/	63,100 3/
July	73,800	2,040,000	78,300 3/	342,000 3/
August	66,400	2,320,000	21,400 3/	321,000 3/
September	50,700	1,990,000	71,500 3/	446,000 3/
October	30,600	1,250,000	19,400 3/	411,000 3/
November	42,600	1,960,000	2,400 3/	58,700 3/
December	82,300	2,710,000	2,330 3/	72,000 3/
January-December	741,000	25,500,000	527,000	3,090,000
2002:				
January	46,000	1,720,000	237,000 3/	776,000 3/
February	136,000	3,070,000	2,900 3/	85,000 3/
March	55,300	1,710,000	575 3/	16,500 3/

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Free alongside ship (f.a.s.) value.

3/ All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.